Kearsarge gets Navy's First Afloat Fab Lab

By Chris Wyatt, MARMC Public Affairs Specialist

Mid-Atlantic Regional Maintenance Center (MARMC) and USS Kearsarge (LHD 3) signed a Memorandum of Understanding (MOU), onboard the ship in Norfolk, Sept. 29, and installed the Navy's first afloat mini Fabrication Laboratory (Fab Lab).

Kearsarge Commanding Officer Capt. David Bossert and MARMC Commanding Officer Capt. Steven Stancy were on hand for the delivery and installation of the mini fab lab.

"This is a game changer. In a few years, I can definitely see this on every ship in the fleet," said Bossert.

The mini fab lab consists of two additive manufacturing (3D) printers along with a desktop Computerized Numerical Control (CNC) mill. A large flat screen monitor, wireless keyboard and mouse are also included. The 3D printer has the ability to build various sizes and shapes out of polymers. The CNC mini mill uses subtractive manufacturing processes to create circuit boards.

Kearsarge Sailors have been training in the MARMC Fabrication Laboratory since Sept. 21, as an introduction to digital manufacturing and innovation. They were trained in many 3D rendering programs, soldering basics and electronic component instruction. The goal of the training was to give them the basic instruction needed to operate a mini fab lab while underway.

“We are using Sailors to train Sailors on how to use the equipment, said MARMC Fab Lab Project Officer Lt. Todd Coursey. “This is pretty special because in the past when the Navy got new equipment we were quick to bring in outside help. With this new mini fab lab the Kearsarge Sailors are being trained by MARMC Sailors. Kearsarge Sailors become the subject matter experts and can help their fellow Sailors when they come to the fab lab for help.”

The mini fab lab will be used as a place for Sailors to innovate. Kearsarge Electrician’s Mate 3rd Class (Surface Warfare) Nuvaro Shavers is already ahead of the curve. While attending training at MARMC he took a problem on the ship and designed a tool to make his job easier.

“As an electrician in the Navy, I have to be very careful when working on equipment. When I use a multi-meter, I normally have to tape it up with electrical tape. During my training at MARMC, I have designed an electronically safe multi-meter clip out of polylactide (PLA),” said Shavers. “It won’t be as strong as metal but the tensile strength is more than enough for the delicate equipment I need it for. I’m not the most creative person by far but I had a problem in my workspace and used the Fab Lab to create a solution.

Stancy is excited about seeing the Fab Lab go to sea. He said that the Fab Lab is where creativity meets reality.

“This is what the Fab Lab is all about. The Fab Lab is designed to empower the warfighter to use creative thought to solve an issue in his or her work space,” said Stancy. “We appreciate the support from the Kearsarge team and we look forward to working with them as we both move forward with additive manufacturing and innovation.”